

Datasheet for ABIN7550665

PGAM5 Protein (AA 1-289) (His tag)



Overview

Quantity:	1 mg
Target:	PGAM5
Protein Characteristics:	AA 1-289
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PGAM5 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Purpose:	Custom-made recombinat PGAM5 Protein expressed in mammalien cells.
Sequence:	MAFRQALQLA ACGLAGGSAA VLFSAVAVGK PRAGGDAEPR PAEPPAWAGG ARPGPGVWDP
	NWDRREPLSL INVRKRNVES GEEELASKLD HYKAKATRHI FLIRHSQYHV DGSLEKDRTL
	TPLGREQAEL TGLRLASLGL KFNKIVHSSM TRAIETTDII SRHLPGVCKV STDLLREGAP
	IEPDPPVSHW KPEAVQYYED GARIEAAFRN YIHRADARQE EDSYEIFICH ANVIRYIVCR
	ALQFPPEGWL RLSLNNGSIT HLVIRPNGRV ALRTLGDTGF MPPDKITRS Sequence without tag
	The proposed Purification-Tag is based on experiences with the expression system, a
	different complexity of the protein could make another tag necessary. In case you have a
	special request, please contact us.
Characteristics:	Key Benefits:
	Made to order protein - from design to production - by highly experienced protein experts.

- · Protein expressed in mammalien cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

Grade:

custom-made

Target Details

Target: PGAM5

Alternative Name:

PGAM5 (PGAM5 Products)

Background:

Serine/threonine-protein phosphatase PGAM5, mitochondrial (EC 3.1.3.16) (Bcl-XL-binding protein v68) (Phosphoglycerate mutase family member 5),FUNCTION: Mitochondrial serine/threonine phosphatase that dephosphorylates various substrates and thus plays a role in different biological processes including cellular senescence or mitophagy (PubMed:24746696, PubMed:32439975). Modulates cellular senescence by regulating mitochondrial dynamics. Mechanistically, participates in mitochondrial fission through dephosphorylating DNM1L/DRP1 (PubMed:32439975). Additionally, dephosphorylates MFN2 in a stress-sensitive manner and consequently protects it from ubiquitination and degradation to promote mitochondrial network formation (PubMed:37498743). Regulates mitophagy independent of PARKIN by interacting with and dephosphorylating FUNDC1, which interacts with LC3 (PubMed:24746696). Regulates anti-oxidative response by forming a tertiary complex with KEAP1 and NRF2 (PubMed:18387606). Regulates necroptosis by acting as a RIPK3 target and recruiting the RIPK1-RIPK3-MLKL necrosis 'attack' complex to mitochondria (PubMed:22265414). {ECO:0000269|PubMed:18387606, ECO:0000269|PubMed:19590015, ECO:0000269|PubMed:22265414, ECO:0000269|PubMed:24746696,

Target Details

Expiry Date:

12 months

Target Details	
	ECO:0000269 PubMed:32439975, ECO:0000269 PubMed:37498743}.
Molecular Weight:	32.0 kDa
UniProt:	Q96HS1
Application Details	
Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.